

REMARKS

Applicants respectfully request consideration of the subject application.

This Response is submitted in response to the Office Action mailed August 11, 2006. Claims 1, 3-5, 7-16 and 18-30 are pending. Claims 1, 3-5, 7-16 and 18-30 are rejected. In this Amendment, claims 1, 10, 14 and 24 have been amended, and claims 3, 12 and 25 have been cancelled. No new matter has been added.

35 U.S.C. §§ 102 and 103 Rejections

The Examiner has rejected claims 1, 3, 4, 20, 21, 24 and 25 under 35 U.S.C. § 102(b) as being anticipated by Farnworth (U.S. Patent No. 6,537,482, hereinafter "Farnworth"). The Examiner has rejected claim 28 under 35 U.S.C. § 103(a) as being unpatentable over Farnworth, claims 5, 7-13, 22, 23, 26, 27, 29 and 30 under 35 U.S.C. § 103(a) as being unpatentable over Farnworth in view of Naka, et al. (U.S. Patent No. 6,727,583, hereinafter "Naka"), claims 14-16 under 35 U.S.C. § 103(a) as being unpatentable over Farnworth in view of Iwabuchi (U.S. Patent No. 6,434,017, hereinafter "Iwabuchi"), claims 18 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Farnworth in view of Iwabuchi in further view of Naka, claims 10, 11 and 13 under 35 U.S.C. § 103(a) as being unpatentable over Takeichi, et al. (U.S. Patent No. 6,531,026, hereinafter "Takeichi") in view of Naka, and claims 20 and 22 under 35 U.S.C. § 103(a) as being unpatentable over Takeichi.

Claims 1, 4-5, 7-16, 18-19 and 24-30

The cited art fails to disclose, as claimed in claim 1, *inter alia*: "wherein the meniscus is an imposed meniscus or a capillary action meniscus." Similar limitations are included in independent claims 10, 14 and 24.

Farnworth is directed to a combined method for underfilling the area between a semiconductor die mounted on a carrier substrate and extension of the underfill to encapsulate the semiconductor die in the same process.

Farnworth fails to disclose a meniscus. In fact, the Examiner admits that Farnworth fails to disclose a meniscus, and submits that it would be inherent that the resin would form a meniscus in Farnworth.

Applicants disagree with this characterization of Farnworth. Nevertheless, Farnworth fails to disclose an imposed meniscus or capillary action meniscus, as presently claimed. Furthermore, even if a meniscus were inherent to Farnworth as submitted by the Examiner, an imposed meniscus or capillary action meniscus would not be inherent to Farnworth. If the Examiner were to make a submission, Applicants respectfully request the Examiner provide evidence supporting such an argument.

Neither Naka, Iwabuchi, nor Takeichi disclose an imposed meniscus or a capillary action meniscus.

Thus, the cited art fails to disclose all of the limitations of independent claims 1, 10, 14 and 24. Claims 4-5, 7-9, 11-13, 15-16, 18-19 and 25-30 depend, directly or indirectly, from one of the foregoing independent claims.

Claims 20-23

The cited art fails to disclose, as claimed in claim 20, *inter alia*: “a mold chase including a profile that is capable of causing molding cap compound to originate on a die at a die height that is substantially above the die active surface and below the die backside second surface, and that forms a third surface that is substantially parallel planar to the die backside second surface.”

Farnworth is directed to a combined method for underfilling the area between a semiconductor die mounted on a carrier substrate and extension of the underfill to encapsulate the semiconductor die in the same process. In Farnworth, a sterolithographic process is used to form the structure. As explained beginning at col. 14, line 61, of Farnsworth, a laser is activated to scan liquid resin over portions of the liquid surface to cure the liquid resin to an at least semisolid state. Each scanned location defines the boundaries of an at least semisolid layer. Liquid resin remaining on the semiconductor device is then drained to form the structure as appears in Figure 14. Thus, Farnworth does not disclose a mold chase, as presently claimed. Farnworth does not even disclose molding, at all.

Takeichi is directed to a method for mounting electronic elements which involves arranging a thermosetting adhesive between a circuit board and an electronic element and bonding them together. In Takeichi, a thermosetting adhesive is arranged as discussed above, and a heating and compression apparatus, such as a heat bonder is used to temporarily bond the devices together. The adhesive is then cured. At no point does Takeichi disclose a mold chase, or even molding the adhesive.

Neither Naka nor Iwabuchii disclose a mold chase as presently claimed.

Thus, the cited art fails to disclose all of the limitations of independent claim 20. Claims 21-23 depend, directly or indirectly, from independent claim 20.

Applicants, accordingly, respectfully request withdrawal of the rejections under 35 U.S.C. § 102 and § 103.

Applicants respectfully submit that the present application is in condition for allowance. If the Examiner believes a telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call Jennifer Hayes at (408) 720-8300.

Please charge any shortages and credit any overages to Deposit Account No. 02-2666. Any necessary extension of time for response not already requested is hereby requested. Please charge any corresponding fee to Deposit Account No. 02-2666.

Respectfully submitted,
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